

AWAKE UTAH LAKE!

This lesson plan has been created as a resource for seventh grade teachers to teach the new core standards to their students. It integrates language arts and social studies standards in a meaningful and fun way. To see which specific standards are addressed, please refer to them below.

OBJECTIVE:

Students will share facts about Utah Lake with friends and family members providing opportunities for repetition of the facts to replace common misperceptions.

STANDARDS ADDRESSED:

7th Grade Language Arts

7.W.1 Writing Standard 1:

Write arguments to support claims with clear reasons and relevant evidence.

7.SL.1 Speaking and Listening Standard 1:

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

7th Grade Social Studies: Utah Studies

Standard 1: Students will understand the interaction between Utah's geography and its inhabitants.

Objective 1: Investigate the relationship between physical geography and Utah's settlement, land use, and economy.

b. Identify the physical features and regions of Utah.

Objective 3: Assess how natural resources sustain and enhance people's lives.

a. Recognize the impact of water, minerals, wildlife, and forests on people.

Objective 4: Examine how people affect the geography of Utah

b. Assess how people change the landscape.

c. Examine how altered landscapes affect people.

TEACHER BACKGROUND:

The Utah Lake Commission is a government agency, funded and empowered by numerous area government agencies, including neighboring municipalities, Utah County, the Central Utah Water Conservancy District, and state agencies (including the Department of Environmental Quality, Department of Natural Resources, and the Division of Forestry, Fire & State Lands).

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Local leaders began working together in 2004 to see how they could collaborate better to manage the lake. After several years, the Utah Lake Study Group recommended creating a Commission, to help coordinate a more effective management of the lake. In 2007, the Interlocal Agreement was signed, establishing the Utah Lake Commission. The Commission began work to create a [Master Plan](#) for the lake. It was completed and adopted in June 2009. Using the plan as a road map, the Utah Lake Commission hopes to promote multiple public uses of the lake, facilitate orderly planning and development in and around the lake, and continue enabling individual Commission members to govern their own areas.

A major objective of the Commission is to educate the public about the value Utah Lake is to this region, replacing common misperceptions with facts.

TEACHER MATERIALS:

- A copy of worksheets Utah Lake Facts and “Awake Utah Lake!”

STUDENT MATERIALS:

- A copy of the worksheets Utah Lake Facts and “Awake Utah Lake!”
- The worksheet has a place where three people can sign, indicating at least five facts about the lake have been shared with them.

PROCEDURE:

1. Hand a copy of the worksheet “Awake Utah Lake!” and Utah Lake Facts to each student.
2. Choose a method of reviewing the contents of the facts worksheet with the students.
3. Ask questions, which can be answered by the worksheet.
4. Explain that each student is to interview and share at least five of the facts on the worksheet with three other people before a set deadline. They should also gather facts, ideas, and opinions from those they interview.
5. Have the students record any misconceptions they discover.
6. Discuss any misconceptions as a class during the next class period.
7. Students will write a report stating their opinion of Utah Lake using information obtained from in-class discussion and conversations with those they interviewed. Students will support their claims using reason and relevant evidence.

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ASSESSMENT:

- Participation in class discussion and the student's written arguments supporting claims with clear reasons and relevant evidence.

EXTENSIONS:

- Topics brought up through the class discussion could be assigned to students for further research.

ADDITIONAL REFERENCES:

- [Utah Lake: Legacy](#)
- Utah Lake Legacy videos (See links at utahlake.gov under curriculum)

AWAKE UTAH LAKE

Name _____

Period _____

UTAH STUDIES WORKSHEET – AWAKE UTAH LAKE!

UTAH LAKE is unique! It is different from other Utah lakes. It is Utah's largest freshwater lake and west of the Mississippi, it is the third largest fresh water lake in the United States. Many people know little about Utah Lake or have misperceptions about it.

Attached are some short facts concerning the lake. Your job is to share this information with up to three other people (**not** current Utah Studies students) like your family (parents, siblings, etc.) and friends. Read or explained at least five of the facts to each of the three people with whom you choose to talk. Have the people you share the facts about the lake with sign their names on one of the following lines.

Name

Date

Name

Date

Name

Date

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Vital Statistics Utah Lake covers an average surface area of 96,000 acres. The lake is generally 24 miles long and 12 miles wide. The average depth of the lake is 9 feet, the deepest 14. It is possible to walk across the lake in certain locations. The average temperature of the lake is 73 F, though has risen into the 1980s. The elevation of the lake is generally 4,489 feet. Forty-one percent of the lake's water is lost yearly to evaporation.

The **June Sucker** is a native fish of Utah Lake and in 1986 was placed on the endangered species list. Government funding has resulted in an increase of the June Sucker population from an estimated 300 in 1986 to about 10,000 in 2011. The fish have been raised in hatcheries and planted in the lake and natural spawning waters are being restored in Hobble Creek and Provo River. The June Sucker lives an average of 40 years.

In and Out, Utah Lake receives the majority of its water from the Provo River, Spanish Fork River, American Fork River, and Hobble Creek. Water also enters the lake from below surface natural springs, both hot and cold. The only river leading out of the lake is the Jordan River, on its North end. The lake's elevation is regulated by controlling the water flow of the Jordan River. In the past, Utah Lake has fluctuated widely, but has never completely dried-up.

You can't see your toes, when standing in the waters of Utah Lake because of the murky waters. The murk does not mean the waters are polluted, but simply contains lots of sediment. Sediment is mixture of organic (plant material) and inorganic (dust and dirt) which enter the lake from runoff and wind. Naturally, sediment settles to the bottom, but not in Utah Lake. Carp stir-up sediment while feeding. The wind, moving the water of the shallow lake stirs up sediment. The murky water is called turbid waters by the scientific community.

Carp were introduced into Utah Lake in the 1890s as a replacement for the depleted lake trout population. They have never become a meal favorite. Today, carp make up 75% of the lake's fish population and 90% of the lake's biomass. Carp have been blamed for making the waters of the lake murky by churning the bottom to feed. Carp are also blamed for eating aquatic vegetation, which provide protection to fries (small fish) from their natural predators. Efforts are underway to reduce the carp population to a healthy balance by 2017.

Thunderstorm Danger You could be hit by lightning while boating on Utah Lake, but real danger comes from the wind. Utah Lake, being shallow, rapidly generates large waves from thunderstorm winds. The waves commonly reach a height of three feet, but reduce near the shore. Waves, driven by strong thunderstorm winds can easily swamp or capsize a boat. If a thunderstorm approaches, get off the lake, If you get caught on the water, stay with your boat. Always wear a life jacket.